



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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OFFICE OF THE
REGIONAL ADMINISTRATOR

March 11, 2013

Mark Hasselmann
Federal Highway Administration
40 Western Avenue
Room 614, Federal Building
Augusta, Maine 04330

Re: Aroostook County Transportation Study Presque Isle Bypass Final Environmental Impact Statement (CEQ# 20130020)

Dear Mr. Hasselmann:

The Environmental Protection Agency-New England Region (EPA) has reviewed the Federal Highway Administration's (FHWA)/Maine Department of Transportation's (MaineDOT) Final Environmental Impact Statement (FEIS) for the consideration of the Presque Isle Bypass project proposed in Presque Isle, Maine. We submit the following comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The FEIS provides the results of the Tier 2 Analysis prepared to evaluate the impacts of various alignments of the Presque Isle Bypass of Route 1 to the east of the downtown area of Presque Isle. The FEIS highlights MaineDOT's goals for the project to reduce travel times for north to south traffic through Presque Isle, improve safety in downtown Presque Isle and at high crash locations by reducing truck traffic and through other improvements and providing better access to the eastern side of Presque Isle.

MaineDOT evaluated a total of 11 different bypass alternatives to achieve the project purpose. The FEIS provides specific information regarding the likely impacts of three alternatives advanced for consideration (under both NEPA and the Corps Highway Methodology Process). In addition to the No-Action alternative, the FEIS describes three bypass alternatives:

- Option 4(b) – This alternative involves the construction of 8.3 miles of new highway and the upgrade of 1.7 miles of Route 1. Impacts to approximately 18 acres of wetlands are expected including 10 acres of forested wetlands, 8 new stream crossings and alterations within two critical terrestrial habitat vernal pool buffer zones. The alignment poses the least potential for habitat fragmentation due to its close proximity to Centerline road. A total of 264 acres of active farmland will be impacted and this alternative will also impact 12 structures. This option requires substantial cuts and fills due to steep grades in order for the alignment to meet transportation and safety standards.

- Option 6 – This alternative involves the construction of 9.7 miles of new highway with impacts to approximately 14 acres of wetlands of which 12.6 acres are forested. Impacts include 10 new stream crossings and alterations within four critical terrestrial habitat vernal pool buffer zones. A total of 289 acres of active farmland will be impacted and this alternative will also impact 18 structures.
- Option 7 – (The MaineDOT preferred alternative) This alternative involves the construction of 9.8 miles of new highway with impacts to 22 acres of wetlands which includes 18 acres of forested wetland impact, 10 new stream crossings and alterations to seven critical terrestrial habitat vernal pool buffer zones. A total of 218 acres of active farmland will be impacted and this alternative will also impact 27 structures.

EPA has been involved with the review of the Presque Isle Bypass project and the Aroostook County Transportation Study (ACTS) since 1999. A supplemental DEIS was produced for the ACTS in 2006. Our comments on the SDEIS focused on the need to apply the Corps Highway Methodology to the project. Since that time, we have participated in meetings providing input on the project purpose and range of alternatives to be analyzed. MaineDOT and FHWA have worked in the past to coordinate with federal agencies and this coordination has resulted in a focus on alternatives that will have far fewer direct and indirect impacts to the aquatic environment than those originally proposed. All of the alternatives studied in the FEIS, including the MaineDOT preferred Alternative 7, could result in serious environmental and aquatic impacts that will need to be successfully mitigated. Our comments below focus on wetland impacts and mitigation, water quality and the analysis of secondary impacts—all issues we raised in earlier comments on the project. Significant additional work on these issues will be important following the NEPA process as we continue to work with the Corps to determine whether a Section 404 permit can be issued for the proposed bypass.

Wetland Issues

Regulatory Context and Background

The environmental requirements which must be met by proposals to obtain a Section 404 permit are contained in the Clean Water Act Section 404(b)(1) Guidelines (40 C.F.R. Part 230) (“the Guidelines”). The Guidelines direct EPA and the Corps of Engineers to protect wetlands in several important ways. These regulations at the outset articulate a clear national policy [230.1(c),(d)]:

Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.

From a national perspective, the degradation or destruction of special aquatic sites, such as the filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines. The guiding principle should be that degradation or destruction of special aquatic sites may represent an irreversible loss of valuable aquatic resources. The Guidelines are binding regulations, and the regulatory

tests in the Guidelines at Section 230.10(a)-(d) are independent. Among other things, the Guidelines impose requirements regarding project alternatives, water quality effects, significant impacts to the aquatic environment, and mitigation. The applicant must demonstrate compliance with each subsection in order to receive a permit; one subsection cannot override the need to comply with the other subsections.

For many years federal regulations have required that, in determining whether a Clean Water Act 404 permit can be issued to authorize discharges to waters of the United States, the Corps of Engineers must consider not only the direct aquatic impacts, but also secondary and cumulative aquatic impacts. See 40 C.F.R.230.11(g) and (h). All of these impacts must be considered when determining, among other things, whether the proposed project would cause or contribute to significant degradation of the aquatic environment. Where the combined effect of direct, secondary, and cumulative impacts would cause or contribute to significant degradation, the permit must be denied (see 40 C.F.R. 230.10(c)) unless measures are employed to reduce the impacts, through avoidance or compensatory mitigation, to below the significance threshold. In this instance, our comments on the FEIS include recommended measures for this project that would reduce the overall potential for significant degradation of the aquatic environment consistent with the Guidelines. In addition, the regulations require that all impacts that are unavoidable must be mitigated to the extent appropriate and practicable (see 40 C.F.R. 230.10(d)).

Project Area Wetlands

Forested wetlands dominate the study area with shrub and upland herbaceous communities interspersed throughout. Forested wetlands in the study area include forested bogs, forested fens, deciduous forested swamps and coniferous forested swamps. These forested areas provide habitat for species that prefer interior forest habitat, while the interspersed forest, shrub, and open habitats provide niches for species that prefer edge and early-successional habitats. Numerous, and in some cases extensive, wetland communities within each of the cover types enhances the ecosystem diversity. Shrub wetland systems include shrub bogs and shrub swamps. Emergent freshwater wetlands (herbaceous fens, and marshes and wet meadows) are also found within the larger landscape. Significant vernal pools were inventoried within 300 feet of the centerline of Alignment options 4B, 6 and 7. These pools are a subset of vernal pools with particularly valuable habitat protected by the Maine Natural Resources Protection Act (NRPA). Other state classified non-significant vernal pools were also identified.

The wetlands within the study area provide a valuable range of functions including wildlife habitat, groundwater recharge/discharge, floodflow alteration, fisheries habitat and nutrient removal, retention and transformation. The region has experienced habitat loss and fragmentation related primarily to agricultural activity raising the importance of these wetlands as they become increasingly scarce. Forested wetlands and riparian corridors also help maintain viable wildlife populations by connecting habitats already fragmented by agriculture and development.

Wetland Impacts

The FEIS does a good job identifying the direct impacts associated with the three build alternatives. In addition to the direct wetland impacts described in the FEIS, and summarized above, we believe the proposed project has the potential to result in secondary impacts. The FEIS does not fully address or quantify the specific secondary environmental impacts to the aquatic resources associated with the preferred alternative. Direct/permanent wetland impacts were quantified for all of the proposed alignment options based on wetland class. Table 4-09 describes direct wetland impacts by wetland type for each alignment option. The section concludes on page 4-48 that for each of the alignment options (4B, 6 and 7) there would be direct and secondary/indirect impacts on up to 15 different wetland systems. There is no way to determine from the information provided in the FEIS what, specifically, the secondary impacts will be to wetlands along each alignment corridor.

Vernal pool impacts are described in Section 4.4.3.3 of the FEIS (Significant Wildlife Habitat). It is our understanding that an inventory of all vernal pools was conducted in 2007. Alignment option 7 would intersect critical terrestrial habitat of 7 vernal pools affecting between one and 14 acres of each habitat area. The FEIS does not fully discuss the direct and secondary impacts to the vernal pools nor does the FEIS include the vernal pool study. This information is critical to understanding all of the project impacts and appropriate mitigation options. EPA requests the vernal pool study be provided in advance of a permit application to the Corps.

In summary, Page 4-48 lists the number of wetlands which would potentially be affected by secondary impacts but the FEIS lacks detail regarding the nature of the impacts and how they would be avoided, minimized and mitigated. This information will be necessary to determine compliance with the Guidelines and ultimately whether the project can receive a permit. Based on our review of the information provided in the FEIS, Options 6 and 7 appear to have the greatest potential for habitat fragmentation due to the rural nature of the landscape and diverse upland and wetland community types in the project corridor. EPA will continue to be involved in 404 pre-application meetings and we will provide comments on the 404 Public Notice when it is issued.

Alternatives Analysis

The Guidelines set forth the environmental standards which must be satisfied in order for a 404 permit to issue. Two key provisions of the Guidelines are critical when considering the proposed project. First, the Guidelines generally prohibit the discharge of dredged or fill material if there exists a practicable alternative which causes less harm to the aquatic ecosystem. A discharge of dredged or fill material is prohibited if there "is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem so long as the alternative does not have other significant adverse environmental consequences." [40 CFR 230.10(a)]. This fundamental requirement of the 404 program is often expressed as the regulatory standard that a permit may only be issued for the "least environmentally damaging practicable alternative" or LEDPA. Furthermore, where (as here) the project is not water dependent and involves fill in wetlands and other special aquatic sites, practicable and less environmentally damaging alternatives are presumed to exist unless clearly demonstrated otherwise by the applicant. The Corps identified Alignment Option 7 as the LEDPA on June 27, 2012. EPA believes that additional information regarding specific direct and secondary impacts

of the project will need to be developed to fully support that determination and to inform discussions regarding appropriate mitigation as the project advances into permitting. EPA intends to continue to work with the Corps and MaineDOT on these issues in advance of the filing of a specific wetland permit application. In the meantime, we recommend that MaineDOT provide a list of Transportation System Management/Transportation Demand Management (TSM/TDM) measures being implemented in the near term to address immediate traffic and safety problems in downtown Presque Isle followed by a report of the success of these measures to address some of the transportation and safety issues facing Presque Isle.

Minimization

Section 230.10(d) of the Guidelines states that no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. Minimization of impacts is important given that all of the build alternatives have the potential for severe impacts to the aquatic environment. We support the applicant's plans to incorporate TSM measures in downtown Presque Isle to reduce traffic congestion and improve safety. We believe that these measures should be pursued in advance of construction of any new bypass corridor and measured to determine if the need for a full scale bypass remains once the performance of the existing roadway is optimized. In addition, we note that some measures have been proposed to minimize impacts to wetlands (4-52 Table 4-12). The FEIS suggests that during the permit process additional minimization measures will be employed. This work should include refinements to the alignment to reduce direct and secondary impacts to wetlands and measures to minimize impacts from stream crossings. The current commitment to measures to minimize stream crossing impacts (see page 4-101 of the FEIS) is not strong and indicates that MaineDOT "may include" various measures. We believe specific commitments will be critical to help minimize impacts and we intend to provide specific recommendations on these issues in response to the 404 application when it is filed for the project.

Significance of Impacts

The Guidelines state that no discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States. Findings of significant degradation related to the proposed discharge shall be based upon appropriate factual determinations, evaluations, and tests. In this case, the direct impacts to wetland for all of the proposed build options range from 14-22 acres. While the direct impacts are well documented, the FEIS lacks a full analysis of secondary/indirect impacts and potential habitat fragmentation, reductions in groundwater recharge and discharge functions and water quality impacts may result in significant adverse effects on the aquatic environment. Of particular concern are the potential impacts to critical terrestrial habitat of seven vernal pools associated with the construction of Option 7. Effective mitigation will be necessary to reduce the severity of the potential impacts to allow the project to receive a 404 permit.

Compensatory Mitigation

The goal of compensatory mitigation is to replace aquatic resource functions that will be lost or impaired by the authorized activity, or to otherwise maintain or improve the overall aquatic environment. Compensatory mitigation may be provided on a case-by-case basis by permittees through the restoration, establishment, enhancement, or preservation of aquatic habitats.

Compensatory mitigation requirements help support the objective of the Clean Water Act, which is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (33 U.S.C. 1251(a)). Compensatory mitigation will be required to help the project comply with the Guidelines.

For unavoidable wetland impacts, section 230.10(d) of the Guidelines and Corps and EPA policy require that compensatory mitigation be aimed at offsetting the functions and values of the aquatic ecosystem which are lost and degraded at a particular site. At this juncture, we do not have enough information to determine whether the mitigation options presented will offset the severity of direct, secondary/indirect and cumulative impacts to aquatic resources from the proposed project. The analysis in the FEIS (page 4-52) focuses only on mitigation for direct impacts (including the ratio's listed on Page 4-53). Prior to consideration of specific mitigation sites, we strongly advise FHWA and the MaineDOT to accurately characterize and quantify all of the aquatic impacts resulting from the project. Once potential losses are understood work can be done to determine whether candidate sites are suitable for restoration, creation and/or preservation.

Five mitigation sites are described on page 4-57 of the FEIS. At this stage it is premature to offer specific recommendations and comments on the proposed mitigation options presented without detailed information regarding the direct and secondary project impacts. For the Haynes Parcel, EPA is currently working with the Corps and MaineDOT to determine its suitability for use as a potential mitigation bank deposit. In order to meet the requirements of the mitigation rule the mitigation plan must address direct and secondary impacts that result from the project.

Water Quality

We note that the Preferred Alignment (Option 7) does not intersect any drinking source water protection areas. However, we remain concerned about storm water and aquatic habitat issues at stream and river crossings, such as over Clark and Williams Brooks in the south and the Aroostook River in the northern part of the project area. We strongly encourage MaineDOT to ensure full compliance with Maine DEP's Stormwater General Standards and its own *Best Management Practices for Erosion and Sedimentation Control Manual*. For winter season snow and ice removal, anti-icing with brine compounds should be used to reduce overall chloride impacts as much as possible.

Given the current rural environment (fields/forest) along much of the preferred alignment, we believe it is unlikely that project area streams are now impaired by sodium chloride. We continue to believe that pre- and post-construction monitoring using datasondes deployed downstream of the bridge crossings be performed over at least two subsequent winters (December-April) to assess potential water quality impacts to streams from deicing activity following project implementation. We are willing to assist MaineDOT in developing and executing an appropriate sampling plan for such an effort.

Indirect and Cumulative Impacts

We believe the FEIS sections on Indirect and Cumulative Impacts are improved by the business survey conducted by RKG Associates in 2007, although we note that more than 5 years have

gone by, and there may have been changes in the business community that would cause survey responses to change. The FEIS cites an analysis of aerial photography to develop an estimate of the potential acreage of indirect development that may be induced by the project at key intersection locations. The maximum foreseeable indirect development is estimated to be 16 acres of active agricultural land and 10 acres of undeveloped forest land being converted to developed land. Since there is much more than 26 acres of undeveloped forest and agricultural land in the vicinity of the interchanges, it is unclear whether these estimates are reasonable. We assume that some of the land in the vicinity of interchanges is undevelopable because it is wetland, but the analysis would have been greatly strengthened if such details had been provided. Since development induced at the interchanges may have impacts on natural resources, we recommend that MaineDOT explain how these estimates were developed during wetland permitting.

We appreciate the opportunity to participate in the past in workgroup meetings to discuss the project and to provide comments on the ACTS EISs. We encourage MaineDOT and the FHWA to continue to reach out to EPA and the Corps as the 404 process advances. Close coordination will be critical given our concerns about the magnitude of the impacts identified to date, the need for additional work to identify secondary impacts and the work required to develop a comprehensive mitigation plan to address project impacts.

Please feel free to contact Timothy Timmermann of EPA's Office of Environmental Review at (617) 928-1025 or Jackie LeClair of EPA's Office of Ecosystem Protection at (617) 918-1549 if you wish to discuss these comments further.

Sincerely,



H. Curtis Spalding
Regional Administrator

cc:

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